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1  /*
2  Display.h - A simple track GPS to SD card logger. Display module.
3  TinyTrackGPS v0.6
4
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24 */
25
26 #if ARDUINO >= 100
27   #include "Arduino.h"
28 #else
29   #include "WProgram.h"
30 #endif
31
32 #ifndef Display_h
33 #define Display_h
34
35 #include "config.h"
36
37 #if defined(DISPLAY_TYPE_LCD_16X2)
38   #include <LiquidCrystal.h>
39 #elif defined(DISPLAY_TYPE_LCD_16X2_I2C)
40   #include <LiquidCrystal_I2C.h>
41 #elif defined(DISPLAY_TYPE_SDD1306_128X64)
42   #define U8X8_HAVE_HW_I2C
43   #include <U8x8lib.h>
44   // #include <U8g2lib.h>
45 #endif
46
47 enum Display_Type {
48     SDD1306_128X64,    // Para usar pantalla OLED 0.96" I2C 128x64 pixels
49     LCD_16X2,          // Para usar LCD 16 x 2 caracteres.
50     LCD_16X2_I2C       // Para usar LCD 16 x 2 caracteres. I2C.
51 };
52
53 class Display {
54     private:
55         byte _offset;
56         byte _width;    // Width pixels or numbers of columns for LCD.
57         byte _height;   // Height pixels or numbers of rows for LCD.
58         Display_Type _screen;
59         #if defined(DISPLAY_TYPE_LCD_16X2)
60             LiquidCrystal* lcd;

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61     #elif defined(DISPLAY_TYPE_LCD_16X2_I2C)
62         LiquidCrystal_I2C* lcd;
63     #elif defined(DISPLAY_TYPE_SDD1306_128X64)
64         //U8G2_SSD1306_128X64_NONAME_1_HW_I2C* u8g2_SSD1306;
65         U8X8_SSD1306_128X64_NONAME_HW_I2C* u8x8_SSD1306;
66     #elif defined(DISPLAY_TYPE_HX1230_96X68)
67         U8G2_HX1230_96X68_1_3W_SW_SPI* u8g2_HX1230;
68     #endif
69
70     public:
71         Display(Display_Type t = SDD1306_128X64);
72         Display() = delete; // Constructor por defecto.
73         Display(const Display&) = delete; // Constructor de copia.
74
75         void start();
76         void clr();
77         void print(int, int, const char[]);
78         void print(int, const char[]);
79         void print(const char[]);
80         void print(const char[], const char[]);
81         void print(const char[], const char[], const char[]);
82         void print(const char[], const char[], const char[], const char[]);
83         void wait_anin(unsigned int);
84         void draw_wait(byte);
85         void print_PChar(byte);
86         void splash(int time_delay = 750);
87         Display_Type display_type(){return _screen;};
88     };
89
90 #endif

```